Do Old Testament texts substantiate Geocentrism?

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§1. Introduction.

The sun stood still and didn't go down for about a whole day.

Joshua 10, 13[1]

THE SUN STOOD STILL[1]. The Old Testament text of the Book of Joshua leaves no room for doubt. God, wishing Joshua to gain victory at Aijalon, allows him to fulfil his will: the sun stands still. The text indicates indirectly or, rather, directly that the Sun circles around the Earth. If that wasn't clear enough, also the prophet Isaiah[2], patient Job[3], some of the Psalms[4] and even David's son, Kohelet[5], seem to attest what human senses and logic actually conclude; Earth is stationary and the planets rotate around it. On the one side, not only the Holy Word but also another pillar of society confirms this fact: physics as well as the Aristotelian theory of motion and his Metaphysics. The geocentric theory appears to be irrefutable.

Doubts about Geocentrism began to arise especially when scientists like Nicholas Copernicus and Galileo Galilei began to challenge this model, favouring another theory which placed the Sun at its centre (Much earlier, Aristarchus had attempted to question it to relative success (Puig 1993)).

1 The translation followed throughout the article has been that of the Contemporary English Version. https://www.biblija.net/biblija.cgi?Bible=Bible&l=en

2 Isaiah 38, 7–8.

3 Job 9, 6–7.

4 Psalm 93, 1. Psalm 104, 5.

5 Ecclesiastes 1, 5. The Greek term ἐκκλησιαστής is variously spelt *Cohelet*, *Qohelet* and also *Kohelet*. The latter form will be used throughout the text.

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Heliocentric theory (ἥλιος–κέντρον) seemed thus to contradict Aristotle and the Word; to some, it even looked like an attack on them. From early on, these ideas were condemned. But new discoveries — such as the telescope — and the new evidence they enabled to collect were to shake the ancient cosmological formulation over and over. To philosophers, this new theory contested the Stagirite's thought, as part of his cosmology and metaphysics vanished forever. In the case of theologians, the problem was even worse. If philosophy had its foundations in Aristotle (and his teacher Plato), theologians had before them the Word and the wisdom of the Fathers (Pifarré 2007). That was not to be challenged. A new theological conception was necessary: a new kinship with science which — especially at that time — began to emerge with new landmarks and discoveries. That said, how would it be possible to conjoin the Word and reality? Is what the Holy Scripture tells us literal? Were that true, then the world was made in seven days, Earth is the centre of the universe, we are all genetically children of Adam, and so forth, among other things that we *textually* read in the Holy Scripture. It is true that a great deal of the scientists were Christians for the most part (as was the case with Galileo, Copernicus and Newton), and therefore it wouldn't seem that they pursued anti–religious ends with their new theories. On the contrary: their will, as Galileo proves, was to couple theology and magisterial knowledge with the science that would become increasingly important in the Renaissance and later on, in the Enlightenment.

That was no easy feat, and the cause of much infighting until it was summed up *as the passage from letter to spirit. This is not an automatic, spontaneous passage; rather, the letter needs to be transcended*[6] (Benedict XVI, 2010).

§ 2. Classical cosmology. Brief observations on existing models before Copernicus.

Since a comprehensive presentation of the cosmological vision of the classical world would surpass the scope of this essay, we have considered instead, due to its transcendence and influence, to briefly present some considerations on this worldview, being coincident with the Old Testament texts at the time of their writing (Puig 1993).

In the classical world, new explanatory models will be posited, supported by the Babylonians' and Egyptian's earlier work, who had already embarked on the

[6] Benedict XVI. (2010). Post–synodal apostolic exhortation VERBUM DOMINI of the holy father Benedict XVI to the bishops, clergy, consecrated persons and the lay faithful on the world of God in the life and mission of the church.

study of the heavens, albeit still conferring a mythical character upon them (Hoskin 2016). With slight variations, the basic principle until the revolution brought by Nicolas Copernicus was that of the Earth as the centre of Cosmos, and the heavens spinning around it. That is because, *de factum*, the rising of the Sun from the East and its westward movement, as well as common sense, would suggest that Earth's rotation was not possible. Eratosthenes had been able to calculate the size of the Earth (Pannekoek 1961), a fact that suggested that is daily rotation would be perceptible in both people's and animals' activities, especially in the case of birds. Plato himself, claiming both that Earth was spherical and that its location was at the center of the Universe — with the stars' circular and uniform motion — reinforcing the Geocentric theory with the prestige of the Socratic thinker and scholar (as he laid down in the Timaeus). His disciple Aristotle systematised part of the existing theories supplementing them with a theoretical foundation (Botteri, Casazza 2015). He established the division of Cosmos in two parts, a heavenly or *superlunary* part, and an Earthly or *sublunary* one. He kept the idea of Earth as the centre of the universe, remaining entirely stationary all the while. The Sun, the planets, the Moon and the stars moved around Earth in circles, on concentric spheres made of aether, moving uniformly.

> From what we have said the explanation of the earth's immobility is also apparent […] It is clear, then, that the earth must be at the centre and immovable, not only for the reasons already given, but also because heavy bodies forcibly thrown quite straight upward return to the point from which they started, even if they are thrown to an infinite distance. From these considerations then it is clear that the earth does not move and does not lie elsewhere than at the centre.
>
> […]. Its shape must necessarily be spherical. For every portion of earth has weight until it reaches the centre, and the jostling of parts greater and smaller would bring about not a waved surface, but rather compression and convergence of part and part until the centre is reached.[7]

In spite of the guidelines put forward by these eminent philosophers, astronomers continued to make observations yielding new knowledge, some of which sparked conflict with the theories in force. One of the problems observed was that of the planets' retrogradation. Plato's circular movement didn't suffice to explain this phenomenon thoroughly (Neugebauer 1969). However, the personality of the period that was most influential up to the Scientific

[7] *On the heavens*. Book II, chapter 14: Actual position and state of the Earth

Revolution was Claudius Ptolemy. His publishing of the *Almagest* and the formulation of the deferent–and–epicycle system (an invention attributed to Apollonius of Perga) offered an explanation on planetary retrogradation and to the detected variation in brightness. In all appearances, no further theories would be necessary from then on. The Alexandrian formulated a flexible system which explained orbits with multiple movements. Perhaps that was part of its main problem, as it required up to 80 movements in order to explain certain orbits, which overcomplicated the formulated model. It is only fair to remind that Ptolemy didn't come up with this theory single–handedly but rather, he synthesised and assembled part of the information available at the time[8].

A further illustrious name is that of Aristarchus of Samos who was the first to ever formulate the Heliocentric theory, according to which the Sun stands at the centre of Cosmos. The external surface was occupied by the fixed stars, whereas the internal one was occupied in concentrical circles by Mercury, Venus, the Moon, the Earth, Mars, Jupiter, and Saturn. He claimed the distance between the Sun and the Earth is too high and that the Sun is much larger than Earth (Massa 2007). In short:

> Around 150 a.C. the Greeks had managed to determine accurately enough — scientifically— the shape and size of the Earth and its distance from the Moon. Their universe was an enormous sphere in whose centre was the Earth–Moon system (González de Posada, 1994).

The thought of the Greek scholars, especially that of Claudius Ptolemy, will remain valid throughout the Middle Ages. The Aristotelian–scholastic influence prevailed until the Renaissance as *an incontrovertible sociological, academic and religious truth* (González de Posada 1994), with little innovation. Nevertheless, as we said before, the harmony was disrupted when Nicholas Copernicus, along with other scientists like Galileo and Kepler, established the Heliocentric theory with rigour at the time of the Scientific Revolution.

From then on, problems would prove continual since, among other things, they dared to confront the Holy Scripture and Aristotelian philosophy, which meant trouble with theologians and philosophers alike (Sicre 2000).

[8] Contributions by Apollonius and Hipparchus have been used.

§ 3. The Hebrew people.

> Its basic ideas are those of a clear and simple cosmology that could fully satisfy men of a primitive type and a simple soul, full of imagination and feeling, but scarcely used to analysing things and the causes of things (Schiaparelli 1969).

The Old Testament texts, of which a great many were written in Hebrew, served to prove the antiquity of Israel and the worth of its culture for its own population and other nations (Ska 2012). Some knowledge of the Semitic people may allow us to better understand the texts. As stated earlier, they seem to display a Geocentric cosmological conception. Was that, however, among the aims of the Old Testament authors? An exegesis of the Bible allows us to assert that this field (astronomy) is not where the thought of Israel has manifested itself at the height of its powers and originality (Schiaparelli 1969). That claim doesn't only apply to astronomy, but also to the study of nature and its laws, which were mostly sidelined in comparison, at least, to other preceding and subsequent peoples or cultures. This statement doesn't want the reader to conclude there were no wise men in Israel: the Scripture is clear enough in that regard, making clear these leaders knew the right time to do what needed to be done[9]. The people of Israel has a clear calling and it will concentrate its efforts on it. Its essence, its fundamental raison d'être, is to be the People[10]. Theologian and Bible scholar Jean–Louis Ska, referring to the earlier books of the Covenant (even it is believed that can be perfectly transposed to others), writes in that regard:

> The stories in the Pentateuch have the aim to form the consciousness of a people; they have the aim to create a common consciousness and a sense of belonging to a single nation (Ska 2012).

That would be doubtlessly the fundamental, the essential concern for the People to focus its efforts upon. However, a close reading of the Word allows us to glimpse some other reasons for the Hebrew people's lack of development in cosmological matters which, in fact, were to some Israelites an object of fear (Schiaparelli 1969). When it came to studying cosmological phenomena

9 1 Chronicles 12, 33.

10 Exodus 24, 3–8. Deuteronomy 29, 1.

(Cumont 1935), some peoples lapsed into outright idolatry, with all that entailed. They replaced the study and consecration to Yahweh with natural and heavenly phenomena, including, in some cases, Sun worship. Those were perils to avoid, against which even the prophets had cautioned:

> You have worn yourself out, asking for advice from those who study the stars and tell the future month after month. Go ask them how to be saved from what will happen. People who trust the stars are as helpless as straw in a flaming fire. No one can even keep warm, sitting by a fire that feeds only on straw.[11]

The sense of belonging together, as well as the fear of astrolatry, will remain two tenets of the Hebrew people, as reflected by the library which contains the fundamental writings of the people of Israel (Ska 2012), that is, the Bible. We will now introduce some of these writings.

§ 4. Old Testament texts. Their influence.

At the beginning of the article, we used a quote from the Book of Joshua which clearly refers to the movement of the Sun. Even though the text doesn't belong to one of the best–known Books of the Old Covenant, an exegesis will show how this very same idea reappears in some of the so–called *fundamental* Books. Nonetheless, it is fair to underscore the equal importance granted to the whole of the Revealed Word in the Old Covenant, from Genesis 1,1 to Malachi 4,6[12], although it is certain that some texts, for several reasons, are more popular and revered.

Even if it's not our wish to undertake an exegetic or hermeneutic study of those, we will introduce a few texts in order to appreciate their cosmological nuances. We will see how they support the dominant thinking of their compilation period (an approximate space of time, since establishing the dates of some particular cases is of great difficulty, as we will see).

4.1. BOOK OF JOSHUA

So about noon, Joshua prayed to the Lord loud enough for the Israelites to hear:

"Our Lord, make the sun stop

in the sky over Gibeon,

and the moon stand still

11 Isaiah 47, 13–14.

12 The final book may vary depending on the version of the Old Testament.

over Aijalon Valley."
So the sun and the moon
stopped and stood still
until Israel defeated its enemies.
Joshua 10, 12–13

After the death of Moses[13] in the territory of Moab, the God of Israel's desire to lead the chosen people to *the land*[14] will be passed on to Joshua, as written in the eponymous Book. As a matter of fact, this is a key Book in the context of Deuteronomistic historiography. Some Bible scholars even regard it as a sixth text to be added to the Pentateuch, which should thenceforth be called the Hexateuch (Von Rad 1993). The excerpt we are dealing with, as part of the tales of the country's conquest, shows how Joshua and his people came to the call of the Gibeonite people to aid them against the threat of an Amorite coalition. Joshua himself is encouraged to fight by an oracle of Yahweh, who tries to sow doubt among the Amorites, precipitating their flight. With darkness closing in, nearing nightfall, *Joshua prayed to the Lord loud enough for the Israelites to hear*, causing the Sun to stand still, which brought an increased number of daylight hours in order to keep fighting. They emerged victorious from the battle. The explicit detail that *the sun and the moon stopped and stood still*, indicated plainly that the Sun moved around the Earth, which remained stationary from what we can deduce from here.[15]

However clear the Geocentrist analogy, the difficulty to date the writing of the Book is rather arduous. In fact, the book went through several drafting stages (Abbadie 2007) which make it impossible to establish a single date of writing, but rather of a (long) period of literary production. Research shows that ancient traditions are the genetic basis of the Book. Their compilation in the form of short narrative leads us to the year 900 BC. Subsequent groupings get us closer to the format the text received at the time of King Josiah. The fragment we analysed (Joshua, 10) must belong to this period, as shown by phraseology as well as the subject of choice stages (Abbadie 2007). In spite of that, the Book had not been finished at the time, given that historiography has proved the existence of Deuteronomist drafts. A first one from the 6th century BC, and a second one from the 5th century BC, which would be concluded with

[13] Deuteronomy 34, 5.

[14] Joshua 1, 1–2.

[15] The point here being that most exegetes highlight that the content of the analysed text must be understood as part of a theological–literary construct rather than an exhaustive historical description.

the addition of some priestly tradition retouching which would lead us somewhere between the 4th and the 3rd centuries BC. We can conclude that the Book of Joshua was possibly written over a period of five or six centuries and in several drafting stages.

4.2. BOOK OF PSALMS

THE LORD IS KING.
You put the world in place,
and it will never be moved.
Psalm 93, 1

THE LORD TAKES CARE OF HIS CREATION.
You built foundations
for the earth,
and it will never be shaken.
Psalm 104, 5

The Book of Psalms, known as the Book of Praises in the Hebrew Bible, or the Psalter in the Greek Bible, is a book contemporary to the whole history of Israel, following the course of its history, as a book built up over ten centuries of both personal and community prayers, relentlessly repeated over, amended, readjusted (Collin 1997). The Psalms are hymns dedicated to the Lord, the King (Ps 93) and to Creation (or to God as creator) (Ps 104), that is, structured around the reign of God. We can conclude, therefore, that the context God's creation is a land (the fundamental core of existence) anchored in its foundations and that it will never be shaken (Ps 104).

Let's refer now to the (possible) date of composition. The Book of Psalms is considered by exegesis as a Book of poetry made up of 150 writings[16] which, in principle, are mutually independent. And that's precisely one of its main problems: establishing with the date of its grouping together as a whole. Classically, the Psalter was assigned a Davidian genesis, which would solve the problem of authorship and composition; David would be its author and his kingdom the framework for its dating. Subsequently, its non–global composition was attributed to the work of particular Biblical figures. Again, the authorship and dating problems would be solved, as they would be framed within their lives. Modern criticism, however, dismisses both propositions, partly at least, making the Psalter's composition, as well as its origin, hard to date accurately. It is accepted that the Book may be subdivided in five minor books[17], even though the reason for such subdivision and its date are also unknown. The town Psalms we analysed, 93 and 104, are part of Book IV. Nowadays it is

16 The numbering is different depending on the version, Hebrew or Greek.

17 I – Ps 1–41, II– Ps 42–72, III– Ps 73–89, IV– Ps 90–106, V– Ps 107–150.

accepted that this Book may have had its origin at the time after the banishment (late 6th century), or else in the Maccabean period (2nd century). We wish to emphasise that not all exegetes fully agree. The pre–exile monarchy has also been proposed as its date of composition[18]. Either way, it is virtually impossible today to find agreement among scholars on the dating of the Book of Psalms, focusing their exegesis not so much on their origin but on their gist.

> There is no doubt that trying to date the Psalms is impossible and pointless. On the other hand, that is of no interest for their understanding and even less to use them in prayer, since the point is to update them with the human experience in them, which is what they confer them continuing relevance and which constitute their eternal newness (Collin 1997).

4.3. BOOK OF ISAIAH

> Then the shadow [made by the setting sun] went back ten steps.
>
> *Isaiah* 38, 7–8

The previous text is part of the promise that *the Lord, God of David*, via Isaiah, makes to the dying king Hezekiah on his deathbed, announcing *I protect you and your city from the king of Assyria* and, meanwhile, I will let you live fifteen years more. As proof that he will hold to his oath, he gives him a signal: *I will make the shadow go back ten steps.*

Most exegetes of the Old Covenant estimate that the Book of Isaiah, considered a major prophet, was written over three different periods and, accordingly, at least by three different authors. Our text belongs to the so–called *Proto–Isaiah*[19]. Isaiah, a Jerusalemite born around 760 BC, was an Old Covenant prophet defined by his defence of the weak, widows, orphans and the oppressed people. His message of social denunciation, as well as of faith in the Lord, will be recurrent in his work. These historiographic and social facts, apparently irrelevant, may be useful to ascertain the Book's dating period, along with the hints given by the Prophet early on in the text: *I am Isaiah, the son of Amoz. And this is the message that I was given about Judah and Jerusalem when Uzziah, Jotham, Ahaz, and Hezekiah were the kings of Judah*[20], which seem to refer to monarchs who ruled Judah between 767 and 698 BC. With that information,

[18] Gunkel and the German school, Mowinckel and the Scandinavian school

[19] First Isaiah (Proto–Isaiah), Is 1–39, Second Isaiah (Deutero–Isaiah): Is 40–55, Third Isaiah (Trito–Isaiah): Is 56–66.

[20] Isaiah 1,1

and taking into consideration that the first 39 chapters include references to Judah and Israel as independent kingdoms, as well as the fall of the Kingdom of the North, Bible exegetes posit the writing date of this Book took place during the period known as pre–exile.

> 4.4. BOOK OF JOB
> God can shake the earth loose
> from its foundations
> or command the sun and stars.
> to hold back their light.
> *Job* 9, 6–7

Job, the good, exemplary man, is put to terrible tests. The confusion this narrative causes is enormous: how can a righteous person under the yoke of Evil? How can he be subjected by pain and disgrace precisely the one who has acted correctly all of his life? This text, belonging to the so–called wisdom literature, continues to trigger multiple reflections with its often equivocal contents. Its title character, Job, has three friends: Eliphaz, Bildad, and Zophar, who are joined by Elihu later on in the book. Throughout the text, they essentially discuss the right punishment for the wicked and the grace bestowed on the righteous. Exegetes sometimes present this Book as a text which illustrates the way God talks about human suffering and the answer of the one who is suffering (or not) from disgrace. There is no doubt that the Book of Job, taken as *a reflection on the ways of God* (Lévêque 2011) is one of the most quoted and commented books in Old Testament literature due to the misfortunes suffered by Job, who is often an emblem of patience.

> Sure enough, Job's typical destiny and the different poems which interpret it question directly the image of God and the hopes of a righteous man facing a calamity he does not deserve (Lévêque 2011).

Since the subject the Book deals with is so intricate, it would seem that everything reported by its author (or authors, as we shall see) refers only to cases or examples that occurred to the main character on Earth. Job has enough problems of his own to allude to cosmological aspects. Nothing could be more removed from the truth. Himself, in his renowned third poem (Job 9–10), while referring to God's greatness and might, will state that He would be able, if he wanted to, to order the Sun not to shine, to seal off the light of the

stars and to shake the Earth off its place: cosmological examples. The God of Israel is boundless in power!

Dating this book is also troublesome, given that it wasn't the work of a single author. The Book of Job, concludes the exegesis, consists fundamentally of an embryonic story to which subsequent poetic dialogues were appended, along with Elihu's speech, and the Poem on Wisdom,[21] making it clear that the book can't be considered a unitary entity. The text we are analysing is a part of the poetic section, the longest one. Scholarly research (Lévêque 2011) suggests that its context is the first half of the 5th century.

4.5. KOHELET – ECCLESIASTES

The sun comes up,
the sun goes down;
it hurries right back
to where it started from.
Ecclesiastes 1, 5

In the earlier text, the son of David, king in Jerusalem[22] explicitly and boldly speaks of the motion of the Sun which *comes up, goes down, it hurries right back to where it started from*, as can be read in the Book of Kohelet. An Old Testament book of wisdom literature, it is frequently understood to be a collection of reflections pronounced, taught and written by himself or somebody else (the Book is written both in the first and the third person) which illustrates what Kohelet himself said. The message he wishes to express is *with all my wisdom I tried to understand everything that happens here on earth*[23]. If Job's text could be considered to belong to the realm of drama, Kohelet's would be a representative of skepticism; *all which appears to be tragic in Job is treated more indifferently in Kohelet* (Ska 2012). Even human existence and everything about it is dismissed as pointless; *all of life is far more boring than words could ever say*[24]. As a matter of fact, a close reading of Kohelet allows us a glimpse of his opinion: *nothing makes sense*. In fact, because of the mentioned skepticism, it seems noteworthy that his reference about Earth is so stringent: Earth is unchanging

21 Exegetes identify a narrative text (1,1–2,13) which becomes poetry (3,1–42,6) and which finally returns to prose (42,7–17).

22 Form in which Kohelet introduces himself.

23 Ecclesiastes 1, 13.

24 Ecclesiastes 1, 8.

and stationary, it is the Sun which moves instead. There is no doubt about it here. Even though Kohelet could have used a myriad of examples, he chooses one which will be understandable to himself — and ostensibly, to his readers too —, cosmology.

As opposed to previous texts, we are certain that the Book of Kohelet was written in the later stages of the rule of King Ptolemy (332 BC – 200 BC). The situation, therefore, differs from the previous examples: we are talking about an expanding Hellenic influence and less of a Mesopotamian world. This exerts doubtlessly an influence on the new texts written at the time and on the New Testament, surely. One such example is this book's common name of Ecclesiastes (εκκλησιαστης). That is, the Greek translation of the original Hebrew[25]. Greek influence, especially striking with Alexander the Great, will be increasingly common among Jewish people. This was the reason that Hellenic Judaism (which originated during Babylonian exile in the 6th century BC and in the diaspora at the time) used the Greek language as its own in coexistence with Aramaic. It must be remarked that popular Greek is known as *koiné* (κοινὴ), a Greek partly distinctive from that of the Academy and the Lyceum. There is no doubt that this rising hellenisation was to influence the Holy Texts, which were written in Semitic languages. It became increasingly common that the inhabitants knew the language of Plato but not Hebrew and, therefore reading and meditation of those texts wasn't possible. It became necessary to translate the Holy Word to the familiar language. This Biblical translation is known as the *Septuagint*, the translation of the Seventy or simply the LXX. This is the context in which the Kohelet–Ecclesiastes was written. The reality of a people less and less Mesopotamian, a reconstructed Temple and, especially, with a remarkable and growing influence of Greek culture and language in daily activity, but with the same cosmological conception as in the earlier texts of the Pentateuch.

§ 5. An easy coexistence

Reading the previous texts has enabled us to grasp the cosmological conception of their authors. Even though it may seem no easy task, as we have seen, to try to establish when they were written, we can however verify *de factum* how completely parallel they run to the dominant Geocentric view. The fact that the texts we used belong to Books classified as historical, prophetic, wisdom

[25] Hebrew term Kohelet — the assembler — is translated in Greek as Ecclesiastes which stems from the Greek *ekklesia*.

literature, and that they have been written under the influence of different cultures indicates the perfect coexistence of the Geocentric cosmological thought with the different Books which constitute the Old Covenant.

		Period (BC)	**Cosmology**
Joshua		10th – 4th/ 3rd	Geocentrism
Salomo	**93**	?	
	104	?	
Isaiah		8th – 7th	
Job		5th	
Kohelet		4th – 3rd	

Table 1 Old Testament Books classified according to their date of writing and the dominant cosmology at the time.

We are clearly within a (long) time period in which on the one hand the Holy Revealed Texts and, on the other, the dominant cosmology go hand in hand without discord. There is no tension. This communion will last until the late Middle Ages. A cause of such durability was without doubt the influence of Aristotelian thought in many branches of knowledge: one of them being Theology and, with it, the Magisterium's official line of thought. In fact, one of the most important thinkers of the age — as well as a doctor of the Church — Thomas Aquinas, will base part of his work on the Stagirite's. However, when it came to cosmological affairs, it was a matter of *saving face* but something very different was the desire to explain the solar system. The new paradigm emerging at the time will imply, immediately, a clash with the defenders of the Stagirite: the Metaphysicians and natural philosophers, who had the opinions of Theologians on their side, as well as the assertions collected in Old Testament texts.

§ 6. The problem nowadays

> However, since God speaks in Sacred Scripture through men in human fashion, the interpreter of Sacred Scripture, in order to see clearly what God wanted to communicate to us, should carefully

> investigate what meaning the sacred writers really intended, and what God wanted to manifest by means of their words (Dei Verbum 1965).

Speaking of a problem might seem incongruous today. No philosopher or theologian (or so I believe) would dare speak in terms of a problem when referring to the (possible) Geocentrism of Old Testament texts. In the same way that nobody would discuss the seven days of creation read in the book Genesis. The previous document, extracted from the Dogmatic Constitution Dei Verbum (1965), and therefore a by–product of the Second Vatican Council (1962–1965), represents generalized views, taken as valid by part of the Magisterium. This reality doesn't however exclude past mistakes[26]. After the age of Scholastics, Theology and scientific knowledge started to conflict. That said, conflict, according to one of the meanings given by the Real Academia Española[27] is: *problem, question, subject of discussion.* The wish to regard conflict as strife, fighting, quarrel, is up to the interlocutors.

> At any rate, even for a much more traditional mindset, three facts must be admitted 1) The Bible has not contributed to the progress of science, it has even been a hindrance. 2) The ignorance of the interpreters, as Galileo said, is to blame, although we must also be understanding. 3) Natural sciences have contributed greatly to Bible study, helping us to focus on its true message (Sicre 2014).

§ 7. Conclusions

> We struggle and know so little about things here on earth.
> How could we possibly learn about things in heaven?[28]

The Old Testament writers belonged to the Hebrew people, who had a distinctive way of acting and working, along with the clear mission to be the People. This is the context in which they, inspired by the Spirit, write the Books. Undoubtedly, they are imbued of these Semitic cultural undertones. Its exegesis, together with hermeneutics, making clear that every text has an additional layer of meaning, which is to say *it says more than it says*, will have the mission to discern that which is fundamental, the reason behind the text, from

[26] Discorso di Giovanni Paolo II ai partecipanti alla sessione plenaria della pontificia accademia delle scienze. Sabato, 31 ottobre 1992.

[27] http://dle.rae.es/?id=AGHyxGk

[28] Wisdom of Solomon 9, 16.

that which only serves as context, a product of the particular time and space when it was written.

> Therefore, Scripture, any religious revelation so understood, is irrelevant and lacks any authority in terms related to the organisation, structure and functioning of nature, which must be itself the object of research and using the natural means of knowledge: el senso regolato (regulated sense) and intelligence, that is, through philosophy or science.[29]

It wasn't the mission of the authors above to explain how the heavens worked or the rotation of Sun around the Earth. In fact, *la rappresentazione geocentrica del mondo era comunemente accettata nella cultura del tempo come pienamente concorde con l'insegnamento della Bibbia, nella quale alcune espressioni, prese alla lettera, sembravano costituire delle affermazioni di geocentrismo*[30]. A skeptic such as Kohelet certainly wouldn't have known much about cosmology, much less about elliptical orbits, but put in the context of his Hellenistic world, he took those ideas from Greek thinkers in order to fine–tune his actual message, the one which he wanted to convey, which was not exactly of a cosmological nature. But the scientific revolution brought a new paradigm that required new answers to questions which probably date back to primitive peoples; *così la scienza nuova, con i suoi metodi e la libertà di ricerca che essi suppongono, obbligava i teologi a interrogarsi sui loro criteri di interpretazione della Scrittura. La maggior parte non seppe farlo.*[31]

> […] the Geocentric worldview and Aristotelianism, based on immediate and misleading experience, are not, properly speaking, philosophy, but passing as real philosophy […].[32]

[29] Views of editor — translator Dr. Miguel Ángel Granada as outlined in: Bruno, Giordano. *La cena de las Cenizas*, traducción, introducción y notas de Miguel A. Granada. 2015. Madrid, Editorial Tecnos. Translation by the author.

[30] Discorso di Giovanni Paolo II Paolo II ai partecipanti alla sessione plenaria della pontificia accademia delle scienze. Sabato, 31 ottobre 1992. The Geocentric representation of the world was commonly accepted in the culture of that age as fully coherent with the teachings of the Bible in which some expressions, taken literally, seemed to construct statements of Geocentrism. Translation by the author.

[31] Discorso di Giovanni Paolo II Paolo II ai partecipanti alla sessione plenaria della pontificia accademia delle scienze. Sabato, 31 ottobre 1992. Thus, new science, with its methods and the freedom for research which are expected, compelled theologians to question themselves as for their criteria of Scriptural interpretation. Most didn't even know how to do it. Translation by the author.

[32] Views of editor – translator Dr. Miguel Ángel Granada as outlined in: Bruno, Giordano. *La cena de las Cenizas*, traducción, introducción y notas de Miguel A. Granada. 2015. Madrid, Editorial Tecnos. Translation by the author.

The object of Revelation is not to teach the people the workings of the universe: its fundamental object is salvation, its interest lies in how to go to heaven, and not heaven itself.[33]

> ... se bene la Scrittura non può errare, potrebbe nondimeno talvolta errare alcuno de' suoi interpreti ed espositori, in varii modi [...].[34]

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[33] Attributed to cardinal Baronio (1538–1607) and picked up by Galileo in his letter to Cristina de Lorena.

[34] Lettera a Padre Benedetto Castelli. Even though Scripture can't be mistaken, it can lead to mistake in some of its interpreters and speakers, in various manners.

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Do Old Testament texts substantiate Geocentrism?

We often read excerpts from the Old Testament that appear to evince an understanding of the Earth as the centre of creation, with the Sun revolving around it. That conception is commonly known as Geocentrism (γεωκεντρισμός), a formulation perfectly consistent with the philosophy of that age, which was strongly rooted in Aristotelianism. Therefore, we are talking about a period which lasted for several centuries in which theological and philosophical thought coexisted faultlessly. This essay contains some such Old Testament texts, which prove to concur literally with the Geocentrism prevalent at the time. To that end, examples have been extracted from a number of Books pertaining to different writing stages.

Keywords: Bible · Joshua · Kohelet · Copernicus · Cosmology.

¿Los textos del Antiguo Testamento corroboran el geocentrismo?

A menudo leemos textos del Antiguo Testamento donde *parece* ponerse de manifiesto la idea de la tierra entendida como centro de la creación con el sol moviéndose a su entorno. Es lo comúnmente conocido como geocentrismo (γεωκεντρισμός), formulación perfectamente compatible con la filosofía contemporánea de fuerte matriz aristotélica. Nos encontramos, por lo tanto, en un periodo —que duraría varios siglos— donde el pensamiento teológico y el pensamiento filosófico cohabitan perfectamente. En el presente artículo se presentan algunos de estos textos veterotestamentarios, que *literalmente* coinciden con el generalizado geocentrismo de la época. Para ello, se han tomado ejemplos de distintos Libros correspondientes a etapas de redacción diversas.

Palabras Clave: Biblia · Josué · Cohélet · Salmos · Copérnico · Cosmología.

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